

Amendments to Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

1. (currently amended) A method for mitigating service outages in a digital broadcast system comprising the steps of:

receiving a first broadcast channel comprising program content from a source data stream, data symbols in said source data stream being arranged in said first broadcast channel in accordance with a first interleaving pattern;

receiving a second broadcast channel, said second broadcast channel comprising substantially the same program content as said first broadcast channel and being transmitted at substantially the same time as said first broadcast channel, said data symbols being arranged in said second broadcast channel in accordance with a second interleaving pattern, said first interleaving pattern and said second interleaving pattern being operable, respectively, to delay transmission of selected said data bytes in said first broadcast channel and said second broadcast channel with respect to corresponding said bytes in said second broadcast channel and said first broadcast channel by a period of time that is selected to reduce service outages; and

de-interleaving said data symbols in said first broadcast channel and said second broadcast channel using at least one data storage device that is adapted to delay said selected data symbols therein by a period of time corresponding to the transmission delays imposed on said data symbols in said first broadcast channel and said second broadcast channel by said first interleaving pattern and said second interleaving pattern, respectively.

2. (original) A method as claimed in claim 1, wherein said at least one data storage device comprises a buffer shift register.

3. (original) A method as claimed in claim 1, further comprising the step of combining the de-interleaved said first broadcast data stream and said second broadcast data stream at each of said plurality of receivers to generate an output signal.

4. (original) A method as claimed in claim 3, wherein said combining step employs Viterbi decoding.

5. (currently amended) A method for mitigating service outages in a digital broadcast system comprising the steps of:

receiving a first broadcast channel comprising program content from a source data stream, data symbols in said source data stream being arranged in said first broadcast channel in accordance with a first interleaving pattern;

receiving a second broadcast channel, said second broadcast channel comprising substantially the same program content as said first broadcast channel, said data symbols being arranged in said second broadcast channel in accordance with a second interleaving pattern, said first interleaving pattern and said second interleaving pattern being operable, respectively, to delay transmission of selected said data bytes in said first broadcast channel and said second broadcast channel with respect to corresponding said bytes in said second broadcast channel and said first broadcast channel by a period of time that is selected to reduce service outages;

de-interleaving said data symbols in said first broadcast channel and said second broadcast channel using at least one data storage device that is adapted to delay said selected data symbols therein by a period of time corresponding to the transmission delays imposed on said data symbols in said first broadcast channel and said second broadcast channel by said first interleaving pattern and said second interleaving pattern, respectively;

combining the de-interleaved said first broadcast data stream and said second broadcast data stream at each of said plurality of receivers to generate an output signal; A method as claimed in claim 3, further comprising the steps of:

receiving a third broadcast data stream comprising said program content transmitted via a terrestrial repeater station; and

combining the de-interleaved said first broadcast data stream and said second broadcast data stream and said third broadcast data stream to generate an output signal.

6. (currently amended) A method for mitigating service outages in a digital broadcast system comprising the steps of:

transmitting a first broadcast channel comprising program content from a source data stream to a plurality of receivers, data symbols in said source data stream being arranged in said first broadcast channel in accordance with a first interleaving pattern; and

transmitting a second broadcast channel to said plurality of receivers at substantially the same time as said first broadcast channel, said second broadcast channel comprising substantially the same program content as said first broadcast channel, said data symbols being arranged in said second broadcast channel in accordance with a second interleaving pattern, said first interleaving pattern and said second interleaving pattern being operable, respectively, to delay transmission of selected said data bytes in said first broadcast channel and said second broadcast channel with respect to corresponding said bytes in said second broadcast channel and said first broadcast channel by a period of time that is selected to reduce service outages.

7. (new) A method as claimed in claim 6, wherein the step for transmitting said first broadcast channel comprises reordering the source data stream in accordance with said first interleaving pattern by selecting different ones of said data symbols in said first broadcast channel and interspersing said selected data symbols among the remaining ones of said data symbols in said first broadcast channel such that said selected data symbols are advanced relative to corresponding ones of the selected data symbols in said second broadcast channel.

8. (new) A method as claimed in claim 6, wherein said data symbols are arranged in the source data stream in accordance with time division multiplexed frames, each of said frames

comprising a selected number of consecutive said data symbols, the step for transmitting said first broadcast channel further comprising reordering said data symbols in accordance with said first interleaving pattern by selecting different ones of said frames provided to said first broadcast channel and interspersing the selected frames among the remaining ones of said frames in said first broadcast channel.

9. (new) A method as claimed in claim 6, wherein said data symbols are arranged in the source data stream in accordance with time division multiplexed frames, each of said frames comprising a selected number of consecutive said data symbols, the step for transmitting said first broadcast channel further comprising reordering said data symbols in accordance with said first interleaving pattern by dividing each of said frames provided to said first broadcast channel into a plurality of sub-frames, each of said plurality of sub-frames comprising a selected number of said data symbols, and interspersing selected ones of said plurality of sub-frames among the other ones of said plurality of sub-frames throughout said first broadcast channel.

10. (new) A method as claimed in claim 9, wherein the step for transmitting said first broadcast channel further comprises interspersing said selected ones of said plurality of sub-frames by a predetermined number of said sub-frames which is different in at least one of said frames relative to other ones of said frames in said first broadcast channel in accordance with said first interleaving pattern.